

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (cancelled)

2. (cancelled)

3. (cancelled)

4. (cancelled)

5. (cancelled)

6. (cancelled)

7. (currently amended) ~~The~~ A multi-hull vessel ~~in accordance with claim 6,~~ said vessel comprising:

a main hull;

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at least two lateral hulls disposed on opposite sides of
said main hull with a surface deck disposed
therebetween;

an engine mounted in said main hull, said engine being
capable of producing exhaust;

a plurality of microbubble injectors disposed in exterior
areas of each of said lateral hulls in which said
microbubble injectors are limited to the subsurface
areas of said lateral hulls, extend around the bottoms
of said lateral hulls and are spaced along inboard and
outboard sides of said lateral hulls wherein each of
said microbubble injectors comprises a plate having an
open area in the range of 40-50%, the open area
defined by a multiplicity of apertures in the range of
1/16 - 1/8 inch diameter; and

a plurality of conduits in fluid communication with said
engine and microbubble injectors;

wherein said engine is capable of producing cooling air
with said conduits directing the cooling air to said
microbubble injectors thereby effecting microbubble

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generation on the exterior areas and whereby upon an
operation of said engine, exhaust produced by said
engine is directed by said conduits to said
microbubble injectors thereby effecting generation of
microbubbles on the exterior areas to occasion
microbubble drag reduction on said lateral hulls.

8. (original) The multi-hull vessel in accordance with claim 7 wherein the subsurface areas of said lateral hulls are provided with a non-wetting hull coating.

9. (cancelled)

10. (cancelled)

11. The A multi-hull vessel ~~in accordance with claim 10~~ said vessel comprising:

a main hull;

at least two lateral hulls disposed on opposite sides of
said main hull with a surface deck disposed
therebetween;

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an engine mounted in said main hull, said engine being
capable of producing exhaust;

a plurality of microbubble injectors disposed in exterior
areas of each of said lateral hulls in which said
microbubble injectors are limited to the subsurface
areas of said lateral hulls, are spaced along one side
of each of said lateral hulls and extend around the
bottoms of said lateral hulls wherein each of said
microbubble injectors comprises a plate having an open
area in the range of 40 -50%, said open area defined
by a multiplicity of apertures in the range of 1/16 -
1/8 inch diameter; and

a plurality of conduits in fluid communication with said
engine and microbubble injectors;

wherein said engine is capable of producing cooling air
with said conduits directing the cooling air to said
microbubble injectors thereby effecting microbubble
generation on the exterior areas and whereby upon an
operation of said engine, exhaust produced by said
engine is directed by said conduits to said
microbubble injectors thereby effecting generation of

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microbubbles on the exterior areas to occasion

microbubble drag reduction on said lateral hulls.

12. (cancelled)

13. (currently amended) ~~The~~ A multi-hull vessel ~~in accordance~~
~~with claim 2,~~ said vessel comprising:

a main hull;

at least two lateral hulls disposed on opposite sides of

said main hull with a surface deck disposed

therebetween;

an engine mounted in said main hull, said engine being

capable of producing exhaust;

a plurality of microbubble injectors disposed in exterior

areas of each of said lateral hulls wherein each of

said microbubble injectors comprises a plate having an

open area in the range of 40 -50%, said open area

defined by a multiplicity of apertures in the range of

1/16 - 1/8 inch diameter; and

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a plurality of conduits in fluid communication with said
engine and microbubble injectors;

wherein said engine is capable of producing cooling air
with said conduits directing the cooling air to said
microbubble injectors thereby effecting microbubble
generation on the exterior areas and whereby upon an
operation of said engine, exhaust produced by said
engine is directed by said conduits to said
microbubble injectors thereby effecting generation of
microbubbles on the exterior areas to occasion
microbubble drag reduction on said lateral hulls.

14. (original) The multi-hull vessel in accordance with claim
13 wherein the subsurface areas of said lateral hulls are
provided with a non-wetting hull coating.

15. (cancelled)

16. (cancelled)

17. (cancelled)

18. (cancelled)